

REMARKS

The primary reference cited in the Office Action is Saltzstein, U.S. Patent Application Publication No. 20030058097. Nevertheless, Saltzstein at page 1, column 2, paragraph 0006, lines 13 - 17 plainly states that by using the system and method of “the present invention, a remote system and/or remote user can readily determined to internal component of a portable medical device has failed or expired”. Further, Saltzstein says, “Accordingly, there is a need for a system and method that allows a portable medical device to effectively communicate its status information when the device is stored medical in an enclosed area.” See page 1, column 1, paragraph 0005, page 2, column 1, paragraph 0017 and 0018. Finally, on page 1, column 1, paragraph 0004, line 8, Saltzstein plainly states that “existing portable medical devices require substantial hardware modifications to retrofit electronics needed for communicating the device’s status information to an external system. For example, a wired or wireless communications circuit may be installed in a portable medical device to facilitate the communication of the device is status information to external system such modifications are generally impractical because of the costs associated with the equipment in the services related to modification.” Nonetheless, the present invention in one embodiment is a practical retrofit existing equipment so that the alarms on present equipment can be amplified and broadcast to a call station to alert medical personnel. See, e.g., Disclosure of present invention, page 8 paragraphs 0039 and 0040. Finally, Saltzstein is used to transmit maintenance information to an alarm attendant, not patient information to medical personnel. See Saltzstein, page 2, column 2, paragraph 0020 and 0021.

Claim Rejections - 35 USC § 102

Claims 1-3, 9-11, and 13-16 stand rejected under 35 U.S.C. 102(a) as being apparently anticipated by U.S. Patent Application Publication No. 20030058097 to Saltzstein et al. (hereafter as Saltzstein).

Regarding claim 1, Saltzstein may disclose a device to alert personnel (i.e. system, method and apparatus for sensing and communicating status information from a portable medical device) comprising: an audio sensor (250,209) adapted to detect an audio signal from a medical device (101); and an interface adapted to activate a call device in response to the detection of the audio signal (page 2, paragraph 0021). However, Saltzstein does not disclose an alert device hooked up to a patient which signals medical personnel of a patient alarm state, such as bradycardia, and asystole as does the present invention.

Regarding claims 2, 3 9, and 10, these claims depend on now allowable claim 1 and therefore, should also be allowed.

Regarding claim 11, the Office Action claims that Saltzstein discloses a apparatus for sensing and communicating status information from a portable medical device, the method comprising: detecting an audible tone generated by a medical device (250,209) (page 3, paragraph 0026); and activating a call device to transmit a signal to a destination (page 2, paragraph 0021). Nonetheless, newly amended claim 11 now claims a method of alerting medical personnel that a medical device is sounding an audible tone, the method comprising: detecting a medical emergency through an audible tone generated by a medical device; and activating a call device to transmit a signal to alert medical personnel. As discussed above, Saltzstein is detecting things like weak battery signals for medical equipment stored in places like a closet. Therefore, with these added limitations (which are certainly absent from Saltzstein), claim 11 is now allowable.

Regarding claim 13, Saltzstein allegedly discloses selecting a mode of operation (page 6, paragraph 0048). However, newly amended claim 13, now claims the method as claimed in claim 11, further comprising selecting at least one of an automatic, manual, and dual mode of operation. No such modes are disclosed in Saltzstein and therefore claim 13 is allowable also for at least this reason.

Regarding claim 14, Saltzstein allegedly discloses the destination is a central medical station (page 2, paragraph 0021) Nevertheless, claim 14 has been amended to include amplifying the signal; using an identification system including a bar code scanner for medication verification; transmitting alert data directly into a patient electronic medical record which can be stored in a computer database or printed to a central printer located at a central medical station. Again, as none of these limitations are disclosed in Saltzstein, it cannot anticipate newly amended claim 14. Therefore, claim 14 is now allowable

Regarding claim 15 and 16, newly amended claim 15 claims a method wherein the signal further includes an identification of a patient. This is not part of the Saltzstein disclosure and thus cannot be anticipated. Thus, this claim is allowable. Amended claim 16, now claims the method as claimed in claim 11, further comprising comparing the audible tone to a group of audible tones to determine the criticality of the audible tone relative to patient health. Again, the Saltzstein invention is used to detect the status of stored equipment not a patient and thus this limitation is not present therein. Therefore, claim 16 as now presented is allowable.

Claim Rejections - 35 USC § 103

Claims 4, 5, and 12 stand rejected under 35 U.S.C. 103(a) as apparently being unpatentable over U.S. Patent Application Publication No. 20030058097 to Saltzstein in view of U.S. Patent No. 4473821 to Yang et al (hereafter as Yang).

Regarding Claims 4 and 5, Saltzstein allegedly discloses that the sensing device 250 also comprises a microphone 209 for receiving audible signals from the speaker 112 of the portable medical device 101. The Office Action claims it would have been obvious to one having ordinary skill in the art to seek a known method to detect the presence or absence of an audible signal and/or to distinguish different audible signals, such as that of Yang.

While the assignee does not completely agree with this characterization of the prior art , newly amended claim 4 now includes a frequency counter adapted to count the number of audio signals within the selected range of frequencies,determine what, if any, additional supplies are needed, and communicate with a computer to reorder needed supplies. None of these added limitations are disclosed or suggested in Saltzstein and Yang (which is primarily used to the detect the presence of a human). Therefore, amended claim 4 cannot be obvious and is now allowable.

The Office Action claims that claim 12 is essentially similar to claim 5 and is rejected for the reasons stated for claim 5. While the assignee does not wholeheartedly agree, claim 12 is dependent on now allowable claim 11 and therefore is also allowable.

Claim 6 stands rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 20030058097 to Saltzstein. Regarding Claim 6, Saltzstein allegedly discloses the sensing device 250 comprised of a microphone 209 for receiving audible signals from the speaker 112 of the portable medical device 101. Interestingly, the Office Action admits Saltzstein does not expressly disclose a microprocessor. However, it claims that it would have been obvious to one having ordinary skill in the art that the time the invention was made to utilized a microprocessor to distinguish various status signals by distinguishing different audible signals. Assignee respectfully disagrees given Saltzstein's purpose. Moreover, new claim 6, encompasses the device as claimed in claim 1, further comprising a microprocessor adapted to sample and store a plurality of audio signals generated by the medical device, wherein the microprocessor is programmed to identify medically critical alarm audio signals. Again, as Saltzstein was built for monitoring equipment in hall closets and not equipment connected to patients, this limitation is not present in Saltzstein. Therefore, claim 6 is now allowable.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 20030058097 to Saltzstein in view of U.S. Patent No.6778090 to Newham entitled "Modular System for Monitoring the Presence of a Person Using a Variety of

Sensing Devices.” Regarding Claim 7, the Office Action admits that Saltzstein does not expressly disclose a time delay adapted to select the time delay before the interface activates the call device. However, it alleges that it would have been obvious to one of ordinary skill in the art to provide such a time delay in order to prevent improper or false activation of call device as taught by Newham. While the assignee disagrees, this claim is dependent on now allowable amended claim 1. Therefore, claim 7 is allowable also because neither Saltzstein nor Newham are used for patient monitoring.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 20030058097 to Saltzstein in view of U.S. Patent No. 4539560 to Fleck et al. Regarding Claim 8, the Action states that Saltzstein does not expressly disclose a reset switch adapted to reset the interface. However, it indicates that a reset switch for resetting the interface to normal operation is taught by Fleck’s “Bed Departure Detection System.” While assignee disagrees, amended claim 8 now includes the device as claimed in claim 1, further comprising a remotely located reset switch adapted to reset the interface via an infrared wireless signal. Fleck’s system is a hardwired communication links for the bed to the central call station. See, e.g., column 5, line 56 – column 6, line 7. Therefore, as this limitation is not present or suggested in Fleck or Saltzstein, claim 8 is allowable.

Claims 17, 18, 19, and 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 20030058097 to Saltzstein in view of U.S. Patent No. 4473821 to Yang. The Office Action states claims 17-20 are rejected under 35 U.S.C. 103(a). Yet the Office Action does not explain these rejections fully. Rather, to support these rejections, the Office Action only refers to claims rejected under 102 grounds, namely claims 1, 3, 4, 5, 6 and 10. Surely, it is the obligation of the Office to clearly support its grounds for rejection and to highlight in the cited references the limitations claimed that are present. Nevertheless, while the assignee objects to this approach, the assignee will address these rejections as if they had been properly supported.

Claim 17 is allegedly essentially similar to Claims 1, 4, 5, and 6 and stands rejected for the same reasons. Nonetheless, while the assignee disagrees, amended claim 17 now includes an audio sensor adapted to detect an audio signal generated by a patient monitoring medical device; and a frequency counter that includes an analog to digital converter. Neither of these limitations are present or suggested in Saltzstein or Yang. Therefore, amended claim 17 is allowable.

Claim 18 stands rejected as it is allegedly similar to claims 1, 4, 5, and 6. While the assignee disagrees, claim 18 now further includes an adjustable filter adapted to pass the audio signal if the frequency of the audio signal is within a preselected range of frequencies and to ignore it if it is not; and a device wherein the information transmitted includes at least one of: patient number, room number and bed number; and a central station for receiving the information and displaying it to medical personnel. As such limitations are clearly not disclosed or suggested in Yang and Saltzstein. Therefore, this claim cannot be obvious and therefore is allowable.

Claim 19 stands rejected as it is allegedly similar to claims 1, 3, and 6. While the assignee disagrees, amended claim 19 now claims a device for alerting personnel further comprised of a display for outputting alert device information and a keypad in communication with the display for the inputting of information by medical personnel. Again such limitations are not disclosed or suggested by Yang and Saltzstein and therefore cannot be obvious. Thus, this claim is allowable.

Claim 20 is allegedly close to claim 10 and stands rejected for the same reasons. New amended claim 20 now further comprises a comparator for comparing the detected alarm tones to a set of stored alarm tones. No such comparator is present in Saltzstein or Yang. Therefore, this claim cannot be obvious. Claim 20 is thus now allowable.

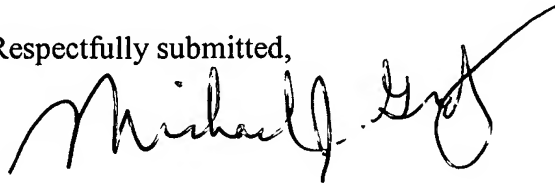
CONCLUSION

For at least the reasons set forth above, a Notice of Allowance is respectfully requested.

Enclosed is a check for \$225.00, which includes the government filing fee by a *small* entity for a two-month extension of time, which applicant hereby requests. No other fees are believed to be payable with this communication. Nevertheless, should the Examiner consider any other fees to be payable in conjunction with this or any future communication, the Director is authorized to direct payment of such fees, or credit any overpayment to Deposit Account No. 50-1170. Also enclosed is a new Power of Attorney signed by the assignee.

The Examiner is invited to contact the undersigned by telephone if it would help expedite the allowance of this application.

Respectfully submitted,



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Dated: _____

4/17/05

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